



Maternal and Perinatal Death Surveillance and Response [MPDSR]

- Determinants of Maternal Death-



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Objectives

By the end of session, the participants will be able to

- identify the determinants of maternal death,
- differentiate between causes and determinants of maternal death and
- classify determinants using “Three Delays” model.



Causes and Determinants

Causes

The immediate clinical or medical reason for the woman's death, classified as a direct or indirect maternal death

Determinants

The "Causes of the Causes" or factors that increased the woman's risk of dying from specific cause



Possible determinants

Possible causes of death	Contributing social factors
Hemorrhage	Poor nutritional status
Ruptured uterus/Obstructed labor	Insufficient access to family planning; Too many closely spaced pregnancies; early marriage
Sepsis	Lack of clean delivery; Lack of clean water in health facilities; Unwanted pregnancy (followed by induced abortion)



Common Determinants of Maternal Deaths



- Poor access to family planning and safe abortion
- Insufficient use of antenatal services
- No skilled attendance at delivery
- Difficulties in obtaining transport
- Insufficient supplies or staff
- Low status of women

These are very different factors, operating at different levels of social influence



The “3 Delays” Model

- Generally refers to events that are associated with obstetric emergency
- Related to seeking and obtaining clinical care
- Divides the process of accessing care into 3 phases:
 - Recognizing an emergency & need for treatment
 - Reaching a health facility where care is available
 - Receiving the care that is needed



Delay 1

Delay in deciding to seek care:

- Rapid recognition of a problem can be critical for saving a mother's life (esp. for excessive bleeding)
- Delay 1 measured as length of time from onset of a complication to decision to seek care



Delay 1

Causes for delay in deciding to seek care:

- Education, socio-economic status and women's autonomy also affect in seeking care
- Determinants include:
 - Inadequate knowledge
 - Reliance on family members who are not present
 - Lack of familiarity with or trust in services
 - Costs related to accompanying woman or paying fees/ expenses related to services



Delay 2



Delay in reaching care:

- Once decision to seek care is made, there can be delays in reaching it
- Determinants include:
 - Unavailable or affordable transport
 - Long distances to facilities
 - Inadequate referral systems between facilities
 - High cost of transportation.
- Inequitable or insufficient distribution of BEOC/CEOC services increase type 2 delays



Delay 3



Delay in receiving care:

- Delays 1 & 2 can lead to a women never reaching a facility or arriving in critical condition
- Delays within a facility also contribute to maternal deaths or “near misses”
- Determinants include:
 - Shortages of staff, equipment or blood products
 - Time lag between arrival and initiation of treatment/surgery
 - Poor technical competence



Addressing Community Level Determinants



- Delay 1 relates mainly to individual and family determinants
- Delay 2 relates to Community determinants
- Delay 3 relates to Health System determinants
- All delays reflect background factors, such as:
 - Women's autonomy & education
 - Availability and accessibility of reproductive health services
 - Quality of care at health facilities



Example of Delay, Contributing Factors & Corresponding Response to Address

Delay	Contributory Factors	Strategies to Address
Delay in seeking care	Poor awareness Insufficient fund No trust on facility	Awareness on emergency sign Community transportation scheme Awareness of quality improvement Adaptation to cultural preference
Delay in seeking care	Distance to reach facility Poor referral system Inability to pay fee	Birth preparedness (moving client close to facility at time of birth) Assign staff to link between facility Social security scheme



Example of Delay, Contributing Factors & Corresponding Response to Address

Delay	Contributory Factors	Strategies to Address
Delay in obtaining care	No staff on duty in weekend Inadequate supply Poor follow-up (after delivery)	Improve staff availability Improve logistic supply system Establish recovery room & monitoring Timely referral



Group work

- List 5 leading causes of maternal deaths
- Divide in to 5 groups
- One cause of maternal death for each group
- Identify the determinants of maternal deaths based on given cause.
- Group the determinants into health related and non-health related determinants
- Classify the determinants in “Three Delays” model



Summary Points

- Social determinants are the “causes of the causes” of maternal deaths, and depend on many social levels
- Addressing maternal deaths thus requires action at every level, not just medical or health services
- Because many women die at home, in transit or soon after arrival at a facility, understanding the delays in receiving care helps analyze patterns of deaths



Summary Points

- MPDSR identifies determinants related to the 3-Delays from the onset of obstetric complications
- At higher levels (national, regional), social determinants beyond 3-delays should be considered (culture, gender)



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